

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,360	03/12/2001	Derek T. Mayweather	M-11493 US	1542
24251	7590	08/02/2004	EXAMINER	
SKJERVEN MORRILL LLP 25 METRO DRIVE SUITE 700 SAN JOSE, CA 95110			SCHULTZ, WILLIAM C	
			ART UNIT	PAPER NUMBER
			2664	

DATE MAILED: 08/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED

AUG 1 2 2004

Technology Center 2600

Notice of References Cited

Application/Control No.

09/805,360

Applicant(s)/Patent Under
Reexamination
MAYWEATHER ET AL.

Examiner

William C. Schultz

Art Unit

2664

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,236,640	05-2001	Klink, Joachim	370/224
	B	US-5,974,027	10-1999	Chapman, Stephen Taylor	370/228
	C	US-5,130,986	07-1992	Doshi et al.	370/231
	D	US-5,894,471	04-1999	Miyagi et al.	370/230
	E	US-6,269,452	07-2001	Daruwalla et al.	714/4
	F	US-5,636,205	06-1997	Suzuki et al.	370/224
	G	US-6,392,992	05-2002	Phelps, Peter William	370/225
	H	US-6,317,426	11-2001	Afanador et al.	370/352
	I	US-6,690,644	02-2004	Gorshe, Steven S.	370/219
	J	US-6,557,112	04-2003	Shimada, Naohiro	714/4
	K	US-5,793,745	08-1998	Manchester, James S.	370/224
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707 05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Office Action Summary

Application No.

09/805,360

Applicant(s)

MAYWEATHER ET AL.

Examiner

William C. Schultz

Art Unit

2664

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6,10-12,16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klink [U.S. Pat. 6,236,640] and further in view of Chapman [U.S. Pat. 5,974,027].

Regarding claims 1,2,4,10,11,16, Klink discloses a method performed by a communications network, said network comprising nodes interconnected by communication links, at least some of said nodes being connected in a ring by said links, said method comprising:

determining whether individual links have failed due to signal degradation. (**col. 3, lines 34-37**)

broadcasting a first link status message identifying one of the individual links that has failed to the nodes; (**col. 3, line 63- col. 4, line 3; col. 4, lines 53-56**)

updating a routing table at each of the nodes such that the routing tables specify routes that avoid the individual link identified the first link status message. (**col. 4 ,lines 53-56; col. 5, lines 12-15**)

Klink fails to disclose determining whether individual links are operating above a predetermined operational threshold.

Chapman discloses a method performed by a communications network, said network comprising nodes interconnected by communication links, at least some of said nodes being connected in a ring by said links wherein the method determines whether individual links are operating above a predetermined operational threshold. **(col. 3, lines 32-35, lines 42-45)**

It would have been obvious to one skilled in the art at the time of invention for Klink to determine whether individual links have failed when the BER is above a threshold mainly because Klink discloses that it is conventional to monitor the signal degradation. Chapman discloses the monitoring of signal degradation will produce a number that must be compared against something, that being a threshold of tolerance for the signal degradation. One skilled in the art of BER monitoring would easily have found suggestion in the Klink reference to use the threshold monitoring of Chapman to determine failures in the network links.

Further regarding claim 1, Klink discloses accounting for bandwidth based on source steered restoration; **(col. 6, lines 25-27)** reserving bandwidth on a worst-case single failure scenario basis; **(col. 6, lines 27-30)** avoiding redundancy in accounting for reservation protection; **(col. 6, lines 30-35 – the calculation of capacity is only assuming one direction so therefore it meets the limitation of avoiding redundancy in accounting for reservation protection)** applying traffic configuration matrices to determine span loading. **(col. 6, lines 26-27 – is a matrix and the span loading is disclosed)**

Regarding claim 3, Chapman further discloses the determining whether individual links are operating above a predetermined threshold comprises comparing a bit error rates associated with the individual links to a predetermined threshold bit error rate. **(col. 3, lines 32-35, lines 42-45)**

Regarding claim 5, Chapman further discloses routing traffic through the network in accordance with the updated routing tables. **(col. 3, lines 45-62)**

Regarding claims 6,12, Chapman further discloses determining whether certain traffic is of a first class or of a second class; providing priority access to the network for the first class traffic. **(col. 3, lines 45-62)**

Claims 7-9,13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Klink [U.S. Pat. 6,236,640] and further in view of Chapman [U.S. Pat. 5,974,027] as above for claims 2,11 and further in view of Doshi et al. [U.S. Pat. 5,130,986]

Regarding claims 7,13, Klink and Chapman disclose as above but fail to disclose transmitting an acknowledge message from each of the nodes that has received the first link status message.

Doshi et al. discloses transmitting an acknowledge message for a request message.

Acknowledgement messages are extremely well known in the art for letting sending machines know that messages they transmitted have been received.

It would have been obvious for one skilled in the art at the time of invention to modify Klink and Chapman with doshi et al. to include an ack for the transmission of link state messages so that link errors could be identified and corrected for.

Further regarding claims 8,14 doshi further discloses waiting for the expiration of a predetermined time period after the broadcasting the first link status message**(col 8, lines 1-3)** determining whether at least a predetermined number of the acknowledge messages have been

received; (col. 8, lines 8-10) re-transmitting the first link status message if fewer than the predetermined number of the acknowledgement messages have been received.(col. 8, lines 8-10)

Further regarding claims 9,15, doshi further discloses the first link status message further includes a session identifier. (col. 3, lines 48-54)

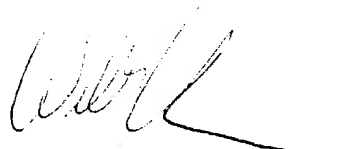
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Schultz whose telephone number is 703-305-2367. The examiner can normally be reached on M-F(7-4)(first bi-week) M-Th(7-4)(second bi-week).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wellington Chin can be reached on 703-305-4366. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

William Schultz


WELLINGTON CHIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600